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ABSTRACT

This report aims to reconstruct the experience of the participants within the school districts in the West Kootenay region of British Columbia during the six-week period of a strike/lockout of nonteaching employees. It also attempts to determine the labor dispute's major effects on school performance and to identify ways of minimizing the effects of such a disruption. Although no reliable data are available on the effects on student academic achievement, the evidence is that the dispute generated increased absence and dropout rates for the remainder of the year, particularly at the secondary level. No one factor is sufficient to minimize the effects of the disruptions, nor are the factors purely technical. They are a combination of social and technical variables. The study identified six key factors. They are the attitude of the teaching staff, the degree of responsibility that students are prepared to assume for their education, the amount of parental support, the flexibility of the curriculum and the teachers, and, a factor that can override all else, the temperature of the school. The starting point for minimizing the effects of the disruption is the recognition that school is not in regular operation. (Author/IRT)

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THE IMPACT ON PUPILS OF A LABOUR DISPUTE IN THE PUBLIC SCHOOL SYSTEM

Phases II and III of a Study

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All of these persons have contributed significantly to the content of this report, either through their special efforts to supply particular school data or through their comments and review of an earlier draft of this report. We hope that our final interpretation does justice to their contributions.

I. SUMMARY

This study is based upon the experience of students, teachers and administrators during and immediately after a labour dispute in schools within the West Kootenay region of British Columbia. This dispute involved a strike/lockout situation over a six-week period between the non-teaching staff and the school boards of the four school districts of Nelson, Castlegar, Trail and Grand Forks.

Although no reliable data is available on the possible effects on student academic achievement, the evidence is that the dispute generated increased absence rates and drop-out rates for the remainder of the year in some schools, particularly at the secondary level. This is an indication of a loss in student attitudes to schooling and in student learning of a kind other than the academic, namely, the learning of study and work habits. It appears that the absence rate increased more amongst students in vocational programs than amongst students in academic programs. There was, however, a general increase in drop-out rates amongst grade 12 students. In at least two of the secondary schools within the region, both operating on a semester system, school marks were affected negatively by the dispute. Perhaps, the most significant impact on pupils was more indirect and longer-term: a deterioration of teacher-School Board and non-teaching staff-School Board relations.

It was the variation in the occurrence of these effects amongst schools, which was the focus of this study. Within a few schools, indeed, absence rates or drop-out rates for the school year 1978-79 actually declined by comparison with previous years. This variation in the effects of the dispute has been studied for its suggestion of key factors in school performance and possible ways to minimize the effects of such a disruption in the school system. (It is believed that many of the principles suggested in this study would apply to other forms of disruption, such as a school fire).

No one factor is sufficient to minimize the effects of the disruption. Nor are the factors purely technical. They are a combination of social and technical variables. The study identified six key factors. The most noticeable one from the West Kootenay experience is the importance of the attitude of teaching staff. What also appears significant is the degree of responsibility that students are prepared to assume for their education. However, the ability and motivation of students to exercise self-reliance is heavily influenced by parental support and therefore, this too is an important factor. From a pedagogical perspective, the degree of flexibility in curriculum and teaching methods enables many other changes in school operations to be effective. Finally, a factor which can override all else is the physical temperature of the school. Without automatic heating, the temperature is likely to vary dramatically from one area of the building to another. Nevertheless, one of the more obvious lessons from the West Kootenay dispute is that the provision of automatic heating is itself no guarantee of minimizing the effects on school performance. Two of the schools most affected by the West Kootenay dispute were equipped with automatic heating but suffered from other problems of transportation, sanitation, or discontent amongst teaching staff.

The starting point for minimizing the effects of the disruption is the recognition that schools are not in "regular operation" during such a dispute. The general recognition of this fact should assist communication and make cooperation amongst parties more likely. There is, of course, a critical need for leadership, but particularly the kind of leadership that can meld the administration of different schools into a cohesive management team able to respond cooperatively to quickly changing circumstances. The situation also requires planning. Even if the period of the dispute cannot be estimated with great accuracy, planning can take place in stages, perhaps over periods of two weeks at a time. Without such adaptive planning, little if any innovation is possible.

Teachers and administrators can take a number of initiatives with school cirricula and operating procedures in order to minimize the disruption. The most effective of these initiatives are likely to be adaptations to specific conditions within an individual school and its community. To help in the development of these local innovations, it is recommended that the Ministry of Education make available to schools involved in any future disputes, a support team of school personnel experienced in handling such a disruption within the school system. Finally, after the dispute is over and settled, school is never back to normal. Even if a school has responded positively, recovery from the effects of the dispute must likely continue for the remainder of the school year. It is a credit to the school personnel of the West Kootenay region that as many schools recovered as well as they apparently did from an extended six-week strike or lock-out of non-teaching employees.

II. INTRODUCTION

a) Background

During the fall of 1978 a labour dispute occurred in four school districts in the West Kootenays of British Columbia which disrupted the classroom instruction over a period of six weeks. This dispute involved a strike/ lockout situation between the members of the Canadian Union of Public Employees (CUPE) and the trustees of the four school boards: Nelson, Castlegar, Trail and Grand Forks. The services generally provided by the CUPE members included janitorial, building maintenance, school bus transportation, steam heating and cafeteria services, and in some districts, secretarial help.

The dispute began at 11 pm on October 25, 1978 when CUPE members at Selkirk College in Nelson went on strike. The following morning all CUPE workers in the Nelson school district joined the strike. On October 27, the trustees in the other three school districts declared a lockout of their CUPE workers.

The dispute continued for six weeks. On December 8, 1978, the Provincial legislature was re-convened and legislation was introduced which called for a return to work.

On behalf of the Ministry of Education, Science & Technology, B.C. Research began a study in January 1979 to determine how pupils were affected by this disruption. The study had four major objectives:

1. To describe the changes occurring as a result of the dispute to the educational delivery system, methods of instruction, curriculum and pupil attitudes;

2. To quantify, as far as possible, the effects of such disputes on pupil achievement;

3. To identify ways of monitoring the extent of disruptions caused by such disputes;

4. To identify possible ways of minimizing the effects of such disruptions on pupils.

Phase I of the study involved the administration of questionnaires to principals, teachers and secondary level pupils in the four West Kootenay school districts. The questionnaire survey was aimed primarily at the first study objective. Results of this survey were published in a B.C. Research document[1] of April 1979, entitled "The Impact on Pupils of a Labour Dispute in the Public School System, Phase I".

Copies of the full report of Phase I were distributed by B.C. Research to each of the West Kootenay school district offices, with a summary report sent to all of the schools in the four districts. Subsequently, additional copies of the report were distributed to School Board officials, available for release to the local of the Canadian Union of Public Employees. Based upon the results of the initial survey, the Ministry authorized two more limited phases of research.

Phase II of the study, on-site interviews with school and district staff and pupils, was conducted in May 1979. The interviews were directed primarily at study objectives 3 and 4. They were also designed to englarge on questionnaire findings about changes in school operations during the dispute. Two separate visits to the school districts allowed for the collection of data on student marks, standardized test results, student absences, and other indicators of possible effects of the dispute.

Phase III of the study consisted of a limited analysis of this achievement and attitudinal-related data. This phase was completed in July 1979 at the end of the school year.

The following report is the outcome of Phases II and III.

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[1] B.C. Research, The Impact on Pupils of a Labour Dispute in the Public School System, Phase I, Richmond: Ministry of Education, Science & Technology, Schools Department, April 1979.

b) Objectives of this Report

It does not require any significant amount of research to conclude that the labour dispute was a stressful situation for participants within the school system. The more difficult question to answer is how stressful was it, and in what ways? Were there really any scars left from the experience? Equally, were there some new strengths and insights found?

Together with the earlier survey of school operations (Phase I), this report aims to reconstruct the experience of participants within the school system during the period of the strike/lockout of non-teaching employees.

The study also attempts to determine the labour dispute's major effects on school performance, and the variation in the occurrence of those effects amongst schools with the West Kootenay region. The effects with which research was originally concerned were the possible implications for student academic achievement, However, the lack of reliable data on student achievement shifted the emphasis to other measures of school performance such as attendance, student retention and student marks.

The overall objective has been to learn from the history of the West Kootenay dispute: to identify possible ways of minimizing the effects of such a disruption. It is believed to be in the best interest of both labour and management in the school system to understand the situation created by such a dispute, and to support efforts to limit its effects upon school performance. Such understanding and cooperation should contribute to the credibility and viability of collective bargaining and the management process in general within the public school system.

c) Methodology

To discover the attitudes of students, teachers and administrative staff, and to gather information on school performance required research of a depth and duration that precluded visits to all 55 schools in West Kootenay region. The Phase II research was therefore conducted with an initial scan of the 4 school districts. A preliminary visit with each of the district superintendents determined a sample of 15 schools, 7 elementary and 8 secondary from a total of 3 districts.

1. The Study Sample

The sample chosen is not strictly representative of the West Kootenay region. The sample was selected primarily to represent a variety of school characteristics: different administrative styles, different types of school physical plant, different curriculum programming and different socio-economic catchment areas. A brief description of each school is given in Table 1.

The sample does not include any schools from District #12, Grand Forks. The small number of schools in this district, their adjacency to one another, and their experience with a similar strike the previous year were all factors apparently minimizing the effect of the dispute in District #12. Indeed, schools in this district were the only ones in the region to maintain virtually regular hours of operation during the period of the dispute. Although District #12 was not included in the sample for puposes of the on-site interviews, school performance data was collected from the district for comparison with tne larger group of schools whose operations were disrupted.

Table 1

Description of Schools in the Study Sample

	District	With/Without Automatic Heating	Reliance on Bus Transportation	Semester System
Secondary Schools:				
School A	X	----------	Bus Transport	Semester
School B	X	Automatic Heating	Bus Transport	--------
School C	Y	----------	Bus Transport	--------
School D	Y	----------	----------	Semester
School E	Y	Automatic Heating	Bus Transport	--------
School F	Z	----------	Bus Transport	Semester
School G	Z	----------	Bus Transport	--------
School H	Z	Automatic Heating	Bus Transport	Semester
Elementary Schools:				
School I	Z	Automatic Heating	Bus Transport	--------
School J	Z	Automatic Heating	----------	--------
School K	Z	Automatic Heating	----------	--------
School L	Y	----------	----------	--------
School M	Y	Automatic Heating	----------	--------
School N	Y	----------	----------	--------
School O	Y	Automatic Heating	----------	--------

2. On-Site Interviews

Interviews were conducted with students within 6 of the 8 secondary schools. Within 7 of the 8 secondary schools and 4 of the 7 elementary schools, interviews were conducted with teaching staff. Principals were interviewed in 13 of the schools; Vice-Principals were interviewed in 2 of the schools where the Principal was not available. A total of 48 teaching staff were interviewed, as compared with 40 students.

The selection of teaching staff was made by the school Principal, on the basis of a representation of a variety of subject areas and a variety of attitudes expressed by staff during the dispute. The selection of

student interviewees was also made by the Principal, according to the criteria of a variety of grade level, academic achievement and interest in school activities. Interviews of staff and students were generally conducted separately from one another, and in pairs of students or small groups of staff. All interviews were given voluntarily and on the condition that comments would be reported anonymously.

In the nature of retrospective interviewing, this research situation had its dilemmas. The interviewee had to be assured that the researcher was not concerned with the personal competence of individual teachers, administrators or students. The dilemma was how to allow for the expression of negative feelings about the experience of the dispute without arousing concern for one's appearance as inadequate or unable to cope. This potentially inhibiting factor was generally controlled by clarifying that the reference for the study was the possible future situation of other school districts, and by making an appeal of the interviewee to contribute his/her experience to the benefit of other colleagues. Another potential problem was the possibility that persons would treat the circumstances of the dispute as an excuse for their performance when, indeed, other factors were more significant. The grouping of interviewees combining different perspectives on the experience of the dispute was an attempt to encourage more objective comment.

3. Lack of Student Achievement Data

Throughout the interviewing process, a search was made for a consensus amongst teaching staff, administrators, directors of instruction, and Ministry of Education officials on a measure of student academic achievement that would be regarded generally as reliable. When school personnel were asked the question about measures of student achievement, they sometimes referred to student marks. However, it is believed by most people in the school system that the factors influencing student marks are complex and that student achievement is only one of them[2].

[2]Holmes, M. (O.I.S.E.) The Effects of Ontario Teachers' Strike on Students-Student Achievement, Ministry of Education, Ontario, 1979.

Indeed, one of the areas of greatest confusion in the post-dispute period was the marking policy, with respect to adjustments made on behalf of students absent for prolonged periods during the dispute or for subject areas where standards of achievement had been revised.

For the purposes of this study, student marks have not been regarded as a measure of student achievement. However, fluctuations in student marks are a significant factor in the broader perspective of school performance. Marks determine, to a significant degree, the future life chances of students.

Amongst participants in the school system, standardized tests were regarded as more reliable measures of academic achievement. However, only a very small proportion of secondary school students receive standardized tests. And, within the elementary schools, only one of the various forms of standardized tests could be regarded as acceptable for its reliability, i.e. the Canadian Test of Basic Skills. The limitation of this particular test is that the skills being examined are general skills which are often acquired or developed outside school as well as within, and therefore, they are the least likely to be affected by a disruption such as the West Kootenay labour dispute.

The lack of schools employing what could be accepted as a reliable test of student achievement has made other indicators of school performance more critical for the purposes of this study. Therefore, cooperation was sought from school personnel in the collection of information on student absences, student drop-outs and student marks that is more detailed than data filed in reports to School Board offices or to the Ministry of Education. Due to the constraints on the time which school personnel could devote to this data collection task, some of the more detailed information is not available for all schools within the sample. Such data has to be treated as indicative rather than as conclusive, but it is helpful in the formulation of suggestions of possible ways to minimize the effects of a labour dispute in the school system.

III. SOCIAL AND TECHNICAL CHANGES IN THE SCHOOL SYSTEM

This section of the report enlarges on findings made in Phase I, about changes in the operational, administrative and curriculum aspects of the school system. Further information is given to explain the variation in changes amongst schools within the four districts. The primary objective is, however, to describe the meaning of such changes for the quality of worklife of participants within the school system, namely, administrators, teachers and pupils.

The chapter begins with a review of the physical and technical changes in school operation and then concentrates upon the social and psychological dimensions.

a) Heating

Amongst the study sample of 15 schools, the majority of secondary schools did not have automatic heating, while the majority of elementary schools did. This distinction is representative of the situation for the total 55 schools of the region, with the qualification that a slightly higher percentage of schools over all had automatic heating than is represented by the study sample.

In the schools without automatic heating, the steam boilers had to be started up each evening, let run through the night and turned off in the early morning before the start of the school day. (The safety requirements are such that, while students and staff are in the school building, the heating system cannot be left operating without trained maintenance personnel in attendance). Therefore, the heat available for the operation of the school day amounted to whatever heat the building could capture and hold from the previous evening. This meant that by 1:00 pm, the temperature in several schools dropped well below a comfortable level. This particular method of heating also favoured some

parts of the school building over other areas which cooled off more quickly. Consequently, variations in classroom temperatures within a given school were often as great as the difference between schools on automatic and manually-operated heating systems.

The start-up and general maintenance of steam heating systems was performed by the district maintenance supervisor -- if he had the necessary training. In one school district, the maintenance supervisor did not have the required training, which meant that the senior secondary school relied quite unsuccessfully upon large propane heaters. In another district where a greater percentage of schools did not have automatic heating, the one maintenance supervisor was hard pressed to service all the schools. In the case of both of these districts, a ticketed boiler operator was hired temporarily from outside the district. In one of the districts, the "scab" boilerman was virtually run out of town by threats to his life, while the other district managed to retain its temporary help for the remainder of the dispute.

As the dispute entered the later weeks of November and early December, the weather turned colder and the physical climate inside the schools varied from comfortable (in the majority of schools), to chilly (in several schools where sweaters and latterly, heavier clothing had to be worn), to uncomfortably cold (in at least one secondary school).

b) Sanitation

The fear of hygiene problems proved to be a generally greater constraint on school operations than was heating.

Garbage pick-up, washroom clean-up and stocking of toilet articles (the use of soap was sometimes eliminated) were all tasks performed by district administration staff (Secretary-Treasurer, Assistant Secretary-Treasurer, Maintenance Supervisor). In one district, School Board officers assisted in these tasks, and depending upon the school, the principal may have also participated.

Tasks requiring the use of heavy equipment such as carpet-cleaning tended not to be done. Dusting and floor-cleaning were either not done at all or done in emergency situations only. The eventual pile-up of dust became depressing to some teaching staff. Because of the problems with the collection and disposal of waste, all secondary schools but one (School H in the study sample) prohibited the eating of lunch at school. Students were obliged to return home for lunch or "hang around" in the city downtown.

c) Available Facilities

The majority of washrooms in each school were locked up for the duration of the dispute. This did not prove to be a noticeable inconvenience.

About half the schools equipped with gymnasia used them for regular physical education classes, but most did not make them available for any extra-curricular use. Shower facilities were not used in either case.

Workshops were available for the industrial arts classes, although temperatures in the shops were usually uncomfortably cold. In one school, the temperature was not high enough to permit glues to adhere.

Primarily due to the concern over strike-breaking, alternative facilities outside of the school building were seldom utilized. One secondary school (School C) benefited from the use of local recreational facilities booked prior to the start of the dispute. In another case, the drama club was "allowed" to rehearse in someone's home, given a prior commitment to perform in a regional festival.

In one notable situation, an elementary school (School M) without automatic heating in its own building, moved its operations into an adjacent secondary school that had an automatic heating system. The two school populations shared quarters successfully for the duration of the dispute.

Audio-visual and other special equipment housed at the district offices were often more difficult to obtain. This formed part of an overall situation where the decreased availability of facilities was experienced more as an inconvenience or an irritation rather than as outright depreviation.

d) Pupil Transportation

As Table 1 indicated, most of the secondary schools normally relied on a special school bus service to transport pupils to school. The suspension of this service did not create an insurmountable problem for most students. The two critical factors were the distance from home to the school and the adjacency of the school to the location of the parent's daily employment. The closer a student lived to the school and the closer the parent's work was to school, the more likely it was that alternative transport could be found to replace the school bus service.

The alternative which developed most often was car pooling by parents. There is no doubt that this was an inconvenience for many parents. The strain on parents increased as snowfall increased and road conditions worsened. Although all districts eventually supplied a car allowance to parents, there was an unresolved concern about lack of liability protection for persons transporting children from other families.

e) Hours of Operation

All of the above factors limited the number of hours during which a school could effectively operate in a given day. On top of these technical constraints, all of the 3 school districts included in the study sample made an administrative decision to restrict the school day to 2 hours for the initial 2 weeks of the 6 week dispute. This policy was made with the intention of expanding school hours as the system developed the capability to cope with the disruption. Some

schools without automatic heating were open only on alternate days, a situation which was primarily the result of a difficulty in scheduling the deployment of school district staff to start up the steam heating.

By the third week of the dispute, most schools were holding classes for 3-4 hours a day. In a very few schools, (a prime example being School D), extra hours of instruction were provided for students wishing to attend. It was the general rule, however, that schools were strict and rigid about the starting and closing hours of school. Any departure from School Board policy was usually regarded as "cheating".

School buildings were open to teaching staff on a more flexible basis. There were a few exceptions: in one case, the Board required that teachers remain in school to complete the regular 7-1/2 hour day even if heating were sub-normal (i.e. School A).

f) Attendance

Most elementary schools had no significant decline in pupil attendance during the dispute. An exception was School H, where attendance averaged 57%, a sharp drop from a normal rate of 94%. The key factor in this situation was the strong feeling of many parents who either were opposed to students attending school during the dispute or were uninterested in making a special effort to transport their children, most of whom lived at a considerable distance from the school. Consequently, 70% of the students were absent at least 20% of the period during the dispute. (See Statistical Appendix, Chapter VIII, (e)).

A general decline in pupil attendance did occur in secondary schools. Moreover, as the dispute wore on, attendance tended to decrease slightly further. There were a few cases where attendance actually improved in the first week or so of the dispute.

It was often said that vocational students displayed a higher rate of absence during the dispute than did students in academic programs. Statistics from one secondary school appear to confirm this impression. Amongst students residing at approximately the same distance from the

school, a random selection of students in a vocational stream had a rate of absence that was more than three times the rate for students in academic programs. Prior to the dispute, the difference in rates was less although vocational students were still more prone to absence. (See Statistical Appendix, Chapter VIII, (d)).

As for attendance of teaching staff during the dispute, it was basically unaffected. A couple of schools had one teacher withdraw on grounds of conscientious objection, but in these cases, the teachers concerned returned to school after only one or two days absence. It was School Board policy in all of the districts that teachers would suffer no penalty for such withdrawal of services other than loss of pay for those days absent.

One of the factors common to many labour disputes but which did not seriously affect attendance in the West Kootenay situation was picketing by the striking or locked-out employees. There were surprisingly few "hot" pickets that closed schools for the day. Most picketing occurred after students and staff had entered the school.

A summary of the changes described above, as they applied to each of the schools within the study sample is presented in Table 2.

Table 2

Summary of Changes to School Operation

	Temperature	Reliance on Bus Transportation	Hours of Instruction	Attendance
Secondary Schools:				
School A	Cold	✓	9-12	Significant Decline
School B	Comfortable	✓	9- 1	A Decline
School C	Chilly-Cold	✓	9-12	A Decline
School D	Chilly	-	Alternate Days	A Decline
School E	Comfortable	✓	12- 3	Slight Decline
School F	Chilly	✓	9- 1	Slight Decline
School G	Chilly	✓	9- 1	Slight Decline
School H	Comfortable	✓	9- 2 with Lunch	Very Significant Decline
Elementary Schools:				
School I	Comfortable	✓	9- 3	Very Significant Decline
School J	Comfortable	-	9- 3	Slight Decline
School K	Comfortable	-	9- 3	No Decline
School L	Chilly	-	8:30-11:30 Alternate Days	No Decline
School M	Comfortable	-	8:30-11:30	Slight Decline
School N	Chilly	-	8-11 Alternate Days	Slight Decline
School O	Comfortable	-	8-11	Slight Decline

(See Statistical Appendix, Chapter VIII, (a) for actual attendance figures.)

g) Curriculum

The most common approach, assumed by almost all teachers at all levels of instruction, was to pare down the curriculum to "core" material. The definition of "core" material was at the teacher's discretion and not necessarily drawn from Ministry of Education guidelines.

Within the elementary schools, a reduction to a "core" curriculum usually meant that an emphasis was placed on language arts and mathematics, and that a loss of some units of instruction occurred in the sciences and social studies. In at least one grade 5 class, only half of the prescribed units in social studies was taught over the complete school year. Almost universally, there was decrease in time devoted to art and music. Wherever these subjects were still taught, there were limitations such as no messy artwork and no pottery, both of which would have created difficult clean-up problems.

At the secondary level, reduction to a "core" curriculum meant reading 3 English novels rather than 5; fewer science labs; a unit less in geography; an emphasis on theory rather than handwork in some shop classes; and perhaps, only a quick scan of atomic physics, calculus and organic chemistry that might be regarded as frills for senior science students. The only areas where a serious loss was felt in the amount of instruction were the activity classes, such as journalism, home economics, typing, music, foreign language learning, and indeed, some of the industrial arts courses. Most of these subject areas rely on a degree of "extra" curricular activity which was usually not possible during the dispute. Foreign language learning suffered from the lack of constant oral practice due either to attendance problems or to a reduction in the frequency of classes in what is often an optional subject area. Practice is also critical to the development of skills in the playing of musical instruments. Difficulty in transporting instruments home curtailed students' practice time that was no longer available at school because of shorter operating hours.

In summary, the consensus amongst teaching staff, administrators, and often students, is that less units of instruction may sometimes have been taught, but not fewer concepts. How much of what was taught was learned is another question, and one very much affected by the instructional methods used during this period.

h) Teaching Methods

The impression given by statements from a wide range of students, teachers and administrators is that, with respect to changes in teaching method during the dispute:

i) some things "worked" which, by conventional wisdom, are not supposed to be effective, and

ii) shorter class periods were often an aid rather than a handicap, but on the other hand,

iii) many of the approaches used were less effective than would have been hoped for.

In most cases, instruction was sped up. Teachers relied most often on a lecturing method. In science classes, there were more teacher demonstration of experiments rather than "hands-on" learning by students. This is one instance where some science teachers feel that their students benefited, and that perhaps, the "hands-on" approach can be over-emphasized.

Class periods were usually shortened to 40 or 50 minutes. In the opinion of many students, the shortening of classroom periods meant that there was less "messing around". The concentration of students was sometimes improved. It would appear that student behaviour in the classroom during the dispute was, if anything, more disciplined. Shorter class periods were, however, a problem for activity classes like workshops, physical education or home economics.

In secondary schools, the most common approach was to link classroom lectures or demonstration to home assignments of additional reading or worksheets to practise and expand the concepts presented in class. Usually, there was little or not time to discuss the problems which students had

in completing the assignments. As well as a student's academic abilities, a key factor in how well a student kept up with assignments was the amount of help and support the student received in the home, because most students believed that they were unable to get help at school.

Some students appreciated the opportunity for greater self-reliance that many of these approaches implied. However, it would appear that many students, perhaps the majority of students in at least one or two of their subjects, fell behind the pace ostensibly being set in the classroom.

i) Extra-Curricular Activities

Many of these activities correspond to an unofficial curriculum. They are the means by which many students develop an indentity with the school. For most students, these activities are essential to the development of inter-personal and social skills.

During the period of the dispute, extra-curricular activities (i.e. band concerts, intramural sports, etc.) ceased in almost all schools. Student councils and council-sponsored activities also ceased. It has been mentioned that one secondary school was able to use pre-booked recreational facilities for some of its team sports. School H in the study sample was one of the few schools to hold a school dance, after which the students had to perform the clean-up.

The students who most resented the absence of extra-curricular activities were the most active, who had the most to lose, and who tend also to be the informal leaders within the student body. How they handled whatever feelings there were of being "penalized" was important in shaping the attitudes of students in general.

j) Student Attitudes

During this period, the role of student changed. No longer were students supplied with transportation: they had to make their own way to school. No longer were teachers generally accessible to answer nagging questions: a student was left much more to his or her own resources.

The relationship between student and teacher, normally one of dependence, became one of greater independence for the student. In the way that they experienced this unanticipated freedom, most students went though a psychological cycle over the six-week period. The experience began as a "lark". It changed into something "serious" as the dispute went on longer than expected. Then, as students could see no end to the dispute, the experience turned into "frustration" for some and "anxiety" for others: the difference in the experience at this stage seems to have depended on how capable a student felt he was in coping with the school-work or, in how a student approached the initial disruption, that is to say, as a sort of challenge or as a penalty.

The elementary school (School M) which was moved into a newer, warmer building for the period of the dispute had no real sense of being short-changed or penalized. Teachers reported experiencing fewer disciplinary problems, more cooperation amongst children in the class, and better attention and recentivity from students.

Particularly in the early days of the dispute when it was viewed by students more as a "lark", there was general enjoyment in the fact that afternoons were available for more hours of play with friends. However, as the dispute wore on and as the daylight hours shortened, it was likely a much smaller number of students who profited from the experience. These are the students who realized or expanded their ability to organize their own time. For some higher achieving students, there was the advantage of not being held back in order to accomodate slower learners. Senior students in some academic programs may never have worked harder. The extra classes provided in one secondary school (School D) were attended most frequently by higher achieving students. This school as a whole seemed to respond to the situation as a challenge: after the school had apparently been closed for one day by some "hot" picketing, it is estimated that 90% of the students were back in the school one hour after the pickets had left the school grounds. This is

an example of where the determination of the local community to maintain the educational process was as important a factor as the individual student's level of achievement. Whenever students did achieve a high degree of self-reliance, they often did so with the benefit of emotional support and other resources within the home.

On the other hand, for students who had the desire but less ability or less support in the home, the experience was a "trial". It was a "difficult time": "problems often did not get sorted out", "routines were broken". For some of these students, it was the first time that they had the experience of "falling behind".

For the less interested students, those whom a teacher described as students "who resist school", it was often "slack city". Assignments were done haphazardly. Attendance suffered and was probably worse than records indicate, since the schools did not have the personnel to check if students skipped out in the course of the school day.

From the small sample of students and school personnel interviewed in this study, it is not possible to say which of these different attitudes was most prevalent amongst the 13,000 students in the West Kootenay region. It is clear, however, that each of these attitudes prevailed amongst a sizeable proportion of the student body. The aim here has been to identify the nature of those attitudes and some of the reasons for their development.

There are some feelings that can be safely described as common to almost all students in the West Kootenay schools. One general feeling was that school became increasingly "tedious", "dopey", "prison-like": "the hum of school was dulled". There were some other feelings that were more critical of society-at-large than of school itself. There was disillusionment that people weren't able to settle the dispute themselves.

k) The Role of Parents

During the dispute at least, parents were recognized as part of the extended school system: many of them were paid a car allowance to drive students into school. Parents also performed considerably more supervision of their children's studies which were now done at home for 1-3 hours an afternoon or evening. There were fights in some homes as parents demanded that children do their homework. Even in less tense home environments, there tended to be a sigh of relief when the dispute was over and the house could return to its normal peace and quiet.

Many parents believe that it was a petition organized by local parents which influenced the provincial government to intervene in the dispute and legislate the employees back to work.

l) Teacher Attitudes

Some school administrators have commented that teachers couldn't help but regard the dispute as a bad thing -- at the very least, it disrupted routines. Many teachers feel even more strongly that they were the real "victims" of the dispute. "Teachers not only missed out, they also put out" is a reference to the increased demands on teachers' time for the preparation of home assignments, etc., with little thanks from a public which viewed teachers as either denying employees their right to strike or as doing an inadequate job of keeping the schools running.

In fact, most teachers felt "used". Perhaps, like most students, in the early days of the dispute, most teachers enjoyed the excitement of something different. Before not long, however, an ever increasing number of teaching staff grew resentful of their role in what they believed to be a "political game". The game was a form of "public charade" in which the chief players were the parties to the dispute and the teachers were unwilling "pawns". The "charade" from the teachers' point of view was the

claim made to the public by the disputing parties that while collective bargaining proceeded, the schools were in regular operation. In fact, most teachers had severe doubts that they were being successful under the circumstances in providing effective instruction. Teachers often viewed what was done in the schools as for appearances' sake, to give the public an impression of a school system in close to normal operation.

Naturally, there were differences of opinion amongst teachers on this issue. However, even the differences were significant, because they created division within the ranks of the teaching staff.

By the end of the dispute, many teachers felt that they were "running out of steam". School had become "something to get through with". By the end of the school year, some teachers commented that they were "bushed". In some schools, for the second consecutive year, they had had no professional development days. There was often a sense of panic in the last school term when the full effects of the time lost became most apparent.

During the dispute, almost all teachers felt a sense of "impotence" and a great deal of uncertainty about where events would take them. Few teachers were ever informed during the dispute of the bargaining positions of the respective parties or how far they were from a solution. The greatest complaint of teachers was: "...if only we knew for how long the dispute would go on..."

m) The Role of School Administration

The normal duties of school administration were set aside for the more urgent matters of unplugging toilets, arranging school heating schedules, answering a constant ring of telephone calls from worried parents, calming students who threatened to run through picket-lines, and meetings -- continual meetings -- between school principals and district staff or between a principal and the teaching staff of a school alarmed, for example, by a rumour that the School Board might be bringing in a strike-breaker. For

district administrative staff, it was a 12-16 hour day and into the evening, driving trucks across the school district to pick up garbage and start-up the steam boilers until they had to be turned off again in the early morning.

In the words of one administrator, "we got so tired of always coping". Near the end of the six-week dispute, there was talk that the schools should be opened for the length of the normal school day, in order that the parties to the dispute could be made to see the consequences of the situation they had created. And yet, how serious or irrepairable the situation became was a question which few persons, if any, in the school system had the information to answer.

IV. THE EFFECTS ON SCHOOL PERFORMANCE

In assessing the effects of the dispute, at least two different time perspectives are relevant. The first time period concludes with the sixth week of the dispute, when it was generally believed that the system was at some breaking-point. The second and longer time frame would extend to the end of the full school year.

During the dispute itself, schools did not have at their disposal any reliable measures of the effects on student academic achievement. At the end of the school year, reliable standardized test results were available from only two elementary schools within the study sample. Unfortunately, even these two schools did not have a sufficient history of test results to allow for any inference about the effect of the dispute on student achievement. A significant indicator, but one difficult to document systematically, was the report by several secondary school teachers that they had lowered standards in specific subjects such as typing, some foreign languages and music. Nevertheless, this extremely limited evidence does not make clear the extent and nature of the dispute's effect on academic achievement.

There are, however, other important measures of school performance besides student academic achievement. Student drop-out rates are a measure of a school's ability to retain its students. Attendance rates are not necessarily an indication of effects upon achievement[3], but particularly in the post-dispute period when transportation is not a problem, they are an indication of attitudes to schooling and of student learning in an area other than the academic, namely, the learning of study and work habits. This attitudinal learning is now regarded by many people as important an outcome of the educational process as is the learning of academic disciplines. Finally, any variation in the distribution of student marks that occurred as a result of a disruption in the school system would amount to a shortcoming in the performance

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[3]Husen, T. "Does more time in school make a difference?", Saturday Review, 1972, April 29, 32-35.

Lytle, J.H. and Yanoff, J.M. "The effects (if any) of a teacher's strike on student achievement", Phi Delta Kappan, 1973, 55, 4, 270.

of the schools which are given the responsibility of assigning educational status on as unbiased and equal a basis as possible.

Within a time perspective that extends beyond the past school year, this study also examined the effects upon factors which are likely to impact upon school performance in future school years. One of those factors is the quality of teacher-and-School Board relations.

The following analysis is based upon the sample of 15 schools out of a total of 55 schools in the four districts. The analysis is not an attempt to reflect the overall experience of the West Kootenay region. Rather, the comparison of differences in the experience of the 15 schools is meant to assist in the identification of key factors to be controlled in minimizing the effects of such a dispute.

a) Student Drop-Out Rates

As indicated by Table 3, drop-out rates during the dispute showed an increase for that time of year in all but two secondary schools in the study sample. For the period extending to the end of the full school year, drop-out rates increased in the majority of the secondary level schools. Information of student drop-outs on a monthly basis was available from three secondary schools, all of which experienced an abnormally high rate of drop-outs in December and January, immediately following the dispute.

Within the 5 schools in the sample having a grade 12, 3 of the schools experienced an increase in drop-outs from grade 12. (See Statistical Appendix, Chapter VIII, (f)). This is consistent with other school labour disputes in the province of Ontario[4]. Here too, there is an impression that a higher than normal percentage of the drop-outs found employment on leaving school. In Ontario, students withdrawing during a dispute tended to have a family background with a higher socio-economic status than was the case for students withdrawing under normal circumstances. Data has not been available to check whether this fact applied in the West Kootenay situation.

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[4]Watson, C. and Gill, M. (O.I.S.E.) The Effects of Ontario Teachers' Strikes on Students: Effects on Student Flow, Dropout and Transition, Ministry of Education, Ontario, 1979.

Another possible influence on the overall drop-out rate for the school year is the opportunity for a "second chance" provided by a semester system. It is this opportunity for students to drop-out and return effectively within the one school year, which is said to explain the difference in the drop-out experience of Schools F and G, as shown in Table 3 below.

Table 3

Secondary School Drop-Out and Absence Rates:
A Comparison with Previous Years: 1977-78, 1976-77

	Drop-Out Rate During the Dispute	Drop-Out Rate for the School Year	Absence Rate During the Dispute	Absence Rate After the Dispute
School A	A Large Increase	Slight Increase	A Large Increase	A Large Increase
School B	Normal	Slight Increase	An Increase	An Increase
School C	A Large Increase	Normal	An Increase	A Decrease
School D	Slight Increase	Slight Increase	An Increase	Normal
School E	Normal	Slight Decrease	Slight Increase	Slight Increase
School F	A Large Increase	Slight Decrease	Slight Increase	Normal
School G	An Increase	Slight Increase	Slight Increase	Normal
School H	A Very Large Increase	Slight Increase	A Very Large Increase	Normal

The rates for the Grand Forks Secondary School which was apparently minimally affected by the dispute:

Grand Forks	Normal	Normal	Slight Increase	Normal

N.B. The classification of a "large" or "slight" increase in drop-out rate, for example, was made in terms of an equal weighting of the percentage change in the rate as well as the number of drop-outs as a percentage of the school population. Comparison of drop-out rates was therefore expressed in terms of their meaning for the experience of each individual school.

Actual figures reported by individual schools are given in the Statistical Appendix, Chapter VIII, (b) and (c).

b) Student Absence Rates

Table 2 indicated that most elementary schools experienced little change in student absences during the dispute.

Amongst secondary schools, at least one school (School H) experienced a dramatic increase in student absence (four times its normal rate) during the dispute. All secondary schools in the study sample experienced some degree of increase in student absence. One school (School C) that had endured a labour dispute the year previous experienced a rate of absence that was higher than normal but less than the previous year's rate during that first dispute.

For the months following the dispute until the end of the school year, (which is the period most likely to indicate any effect on the attitudes of students), only 3 of the 8 secondary schools experienced a noticeable increase in student absence rates compared with the same time period in previous years.

It has already been mentioned that there is an indication from the records of one school that a tendency for vocational students to have a higher rate of absence than academic students increased during the dispute period.

The same data indicates a relationship between withdrawal from school and absence. As might have been expected, students withdrawing during the school year had a significantly higher rate of absence than did students who remained in school. The rate of absence of pupils who withdrew during the dispute increased in the dispute period. Those students who withdrew in the period after the dispute increased their rate of absence in this post-dispute period.

Table 3 would suggest that secondary Schools C, D, E and F were least affected by the dispute. It would appear that most of the schools recovered quite well in the post-dispute period. If one considers the results shown in the second and fourth columns of the table, the indication is that Schools A, B, G and H (in that order) were more affected in the post-dispute period.

The absence rate after the dispute is likely the most significant indicator of a continued effect on school performance: this rate increased in only Schools A, B and E. (During the months of January and February 1979, School B averaged 1,000 days absence per month, only slightly down from the 1,300 days lost in November 1978 in the midst of the dispute). School G had an abnormally high rate of drop-outs in the month of January 1979, which is another possible indicator of after-effects from the dispute. School H appears to have made a very significant recovery in the post-dispute period, given the very large increase in both drop-outs and absence which the school experienced during the dispute.

c) Other Indicators of Possible Effects on Student Attitudes

Teachers and school administrators were sensitive to a number of other aspects of student behaviour. With regard to certain of these behavioural traits, some teachers or school principals kept records for the post-dispute period. The behavioral indicators of student attitudes included the following:

i) frequency of use of library facilities -- one school noticed a drop of 2,000 in the number of books circulated by the library in the post-dispute period as compared with the same period in the previous year;

ii) percentage of overdue library books -- two schools noticed an increase;

iii) appearance of student notebooks -- several schools noticed a deterioration in the post-dispute period;

iv) completion of assignments -- teachers in the same schools as mentioned above noticed a greater difficulty in getting students to complete home assignments;

v) promptness in getting to class -- this aspect of work habits generally worsened;

vi) school vandalism -- for which most schools do not have records, although for several schools the impression is that vandalism increased, particularly the external vandalism. (One school experienced a serious litter problem in the first weeks of the dispute. When students were confronted with the problem, they assumed responsibility for litter control and developed a pattern of behaviour for the remainder of the school year that significantly reduced the school's experience of internal vandalism, i.e. no damage to washrooms and no removal of ceiling tiles).

An indication from outside the school system of effects on students was the report of a pediatrician in one of the school districts of a significant increase in referrals of children with emotional problems during the dispute. Such problems appeared with both high and low-achieving students, that is to say, students who over-exerted themselves not knowing what was expected of them, or on the other hand, students who missed the support to which they were accustomed in school.

d) Student Marks

A partial history of school marks in the West Kootenay secondary schools suggests that school marks were not significantly affected by the dispute. There are schools, however, such as School A where marks do appear to have been affected. The impression that semestered schools were more likely to be affected in school marks is also given some support by the data. (See Table 4).

An overriding influence factor is that most teachers made a compensating adjustment in the marks of "borderline" students, particularly in some semestered schools such as School F. Throughout the dispute and in the

months after, this was, however, a policy area of confusion for many teachers and most students. It was also a source of resentment for teachers when they were told or got the impression that work done during the dispute didn't really count. In one secondary school (School C), the issue was resolved by adjusting the weight given to each school term in the calculation of the final grade: normally, the last term which is the shortest and involves the most review would be given half the weight of the three earlier terms, but for the year 1978-79, each term was given equal weight, which lessened the impact on marks of the dispute period while giving emphasis to the opportunity for catching-up in the later school terms.

Table 4

Final Grade Distributions, 1976-1979,
by Semester, for All Subjects

	1976-77		1977-78		1978-79	
	Semester #1	Semester #2	Semester #1	Semester #2	Semester #1	Semester #2
SCHOOL A*						
% C (or Better)	67%	66%	64%	66%	57%	?
% F (Failure)	13%	13%	11%	11%	16%	?
SCHOOL F						
% C (or Better)	63%	66%	62%	61%	61%	62%
% F (Failure)	14%	14%	12%	15%	13%	12%

*For School A, the pattern of a decline of "% C (or Better)" and an increase of "% F" for the total of all subjects in Semester #1, '78-79 is a pattern which occurred for each individual subject area, i.e. English (for all grades), Mathematics (for all grades).

	1976-77	1977-78	1978-79
SCHOOL C**			
% C (or Better)	72%	72%	76%
% F (Failure)	11%	9%	8%

**Non-Semestered

School H is a semestered secondary school. It reported an increase in the failure rate for Semester #1, '78-79, although at the end of Semester #2 the percentage of pupils promoted to the next grade was 94% as compared with 93% in the previous year '77-78. Nevertheless, the percentage of students who were promoted "with some modification" or a "subject incomplete" was higher in the year '78-79, 22% as compared with 15% in 1977-78.

e) Effects on Parents' Commitment to the School System

This study did not include systematic interviewing of parents within the communities of the West Kootenay schools. However, the interviews with school administrators and students, and random comments from parents met coincidentally in the various communities suggest that, while for some parents the experience revealed the need for schools as never before realized, a greater number of parents had more doubts raised about their support of the public school system.

This negative effect on parental support, though difficult to measure, is real and significant for the viability of the public school system. Much research has already shown that home background factors have a very great influence on student achievement.

f) Teacher-School Board Relations

The comment that teacher-School Board relations "have gone downhill" likely applies more strongly to one of the school districts (X) than it does to the other two districts involved in this study. However, several senior teaching staff in one of the other districts (Y) referred to the School Board as being "out of touch" with teachers' concerns. In more than one district, there was the comment that the School Board needs professional advice on how better to handle personnel matters.

The deterioration of teacher-School Board relations is one of the most significant and most lasting of the effects of this particular dispute. The effects on school performance are indirect, in the way that teacher attitudes "rub off" on student attitudes to school, as well as affecting the degree of commitment of teachers to give the extra support to the 20% or so of the student population who succeed or fail on special teacher assistance. As one teacher put it, "this kind of experience turns you cynical: if nobody else cares, why should you care?"

g) Relations with Non-Teaching Employees

Within most *schools*, relations between non-teaching employees and other school personnel have returned to normal. There are a few exceptions where strained relations have developed since the forced return to work of non-teaching employees.

More bitter and more strained than ever before are the relations between the union representing the non-teaching employees (CUPE) and at least two of the three *school boards* included within the study sample. Whether or not those relations will improve as a result of the recent arbitration of the dispute remains a very large question.

h) Was the System at a Breaking-Point in the Sixth Week of the Dispute?

The evidence from absence data and retrospective student interviews is that, by the end of the sixth week, student attitudes were deteriorating as anxiety and frustration mounted. Teachers were beginning "to run out of steam". School administrators were fatigued from the regular diet of 12-16 hour days. The weather in the late fall was becoming increasingly cold and road conditions were deteriorating.

The timing of the dispute was unfortunate from the perspective of school personnel. It occurred in the middle of the first half of the school year when school routines are just being established and most extra-

curricular activities are planned to begin in earnest. A six-week dispute at the very start of the school year would likely have been less a disruption of academic and extra-curricular school operations.

The overall impressior is that the school system in the West Kootenay region could have continued to operate under the extra-ordinary circumstances for no more than one additional week. The breaking-point would have been the extensive loss of continuity because of the impending Christmas holiday period.

This conclusion of a breaking-point in the seventh week is clearly not a general rule for such disputes in the school system. It has already been mentioned that the timing of this particular dispute was critical. Moreover, a section of this report (Chapter VI) suggests various ways to improve the ability of a school system to cope with this kind of disruption..

V. KEY FACTORS IN SCHOOL PERFORMANCE

One of the more obvious lessons from the West Kootenay dispute is that the provision of automatic heating is itself no guarantee of reducing the effects on school performance. Two of the schools in the study sample (Schools B and H), which were amongst the schools most affected by the dispute, were equipped with automatic heating but suffered from other problems of transportation or sanitation. School B was one of a number of schools also affected by discontent amongst its teaching staff.

No one factor is sufficient to minimize the effects of such a disruption. Nor are the factors purely technical. They are a combination of social and technical factors, which are inter-related so that the development of one aspect of the school system influences the development of others. It is not surprising, perhaps, that the factors which emerge from this study are aspects which would likely be regarded as key to the normal operation of schools. It is simply that, under pressure in a crisis situation, the nature of school organization becomes more apparent. In other words the key features of the organization show up more clearly.

a) The Attitude of Teaching Staff

The most noticeable factor is the attitude of teaching staff. Schools B and E, for example, are both junior secondary schools, operating under almost identical circumstances during the dispute (see Table 5). The one major difference that was uncovered in the research was the degree of resentment felt by a significant number of teaching staff in School B. The extent to which teachers felt victimized by the dispute is very likely to have impacted upon student attitudes and limited the motivation of teachers to develop alternative instructional methods. In the words

Table 5

Summary of School Characteristics and Effects from Dispute

	District	With/Without Automatic Heat	Temperature	Reliance on Bus Transport	Hours of Instruction	Semester System	Absence During Dispute	Drop-Outs During Dispute	Absence After Dispute	Drop-outs for the School Year
Secondary Schools:										
School A	X	Without Auto-Heat	Cold	✓	9-12	Semester	Large Increase	Large Increase	Large Increase	Slight Increase
School B	X	With Auto-Heat	Comfortable	✓	9- 1	--------	An Increase	Normal	An Increase	Slight Increase
School C	Y	Without Auto-Heat	Chilly	✓	9-12.	--------	An Increase	Large Increase	A Decrease	Normal
School D	Y	Without Auto-Heat	Chilly	-	8-12 Alternate Days	Semester	An Increase	Slight Increase	Normal	Slight Increase
School E	Y	With Auto-Heat	Comfortable	✓	12- 3	--------	Slight Increase	Normal	Slight Increase	Slight Decrease
School F	Z	Without Auto-Heat	Chilly	✓	9- 1	Semester	Slight Increase	Large Increase	Normal	Slight Decrease
School G	Z	Without Auto-Heat	Chilly	✓	9- 1	--------	Slight Increase	increase	Normal	Slight Increase
School H	Z	With Auto-Heat	Comfortable	✓	9- 2 Lunch	Semester	Very Large Increase	Very Large Increase	Normal	Slight Increase
Elementary Schools:										
School I	Z	With Auto-Heat	Comfortable	✓	9- 3	--------	Very Large Increase	Normal	Normal	Normal
School J	Z	With Auto-Heat	Comfortable	-	9- 3	--------	Slight Increase	Normal	Slight Increase	Normal
School K	Z	With Auto-Heat	Comfortable	-	9- 3	--------	Normal	Normal	Normal	Normal
School L	Y	Without Auto-Heat	Chilly	-	8:30-11:30 Alternate Days	--------	Normal	Normal	Normal	Normal
School M	Y	With Auto-Heat	Comfortable	-	8:30-11:30	--------	Slight Increase	Normal	Normal	Normal
School N	Y	Without Auto-Heat	Chilly	-	8-11 Alternate Days	--------	Slight Increase	Normal	Slight Increase	Normal
School O	Y	With Auto-Heat	Comfortable	-	8-11	--------	Slight Increase	Normal	Normal	Normal

of one teacher, "I don't think that the students were motivated, nor really was I". An example of the positive effect of teaching staff morale is provided by School H, where a high percentage of teachers tried some different methods in an attempt to cope with a very difficult situation caused by transportation problems and some parent hostility to the dispute.

b) The Responsibility Assumed by Students

In the interviews with students from School H, what was most impressive was the responsible attitude of the students. This was an attitude which seemed to be shared by students with quite different levels of academic achievement. It appeared to be more of a school trait. This was the only secondary school in the three districts studied, where lunches were permitted, which was possible in this case because students took their own garbage home with them -- "otherwise we knew the school would be closed". This was also the only school where a number of special extra-curricular events took place during the dispute, organized primarily by the students. In other schools, the degrees of student initiative showed up on an individual basis, primarily with respect to the "self-reliance" exhibited by students in the performance of academic studies.

c) Parental Support

As mentioned earlier and demonstrated most strongly by the experience of School D, the ability and motivation of students to exercise self-reliance was very much influenced by parental support. The significance of the role played by parents was also demonstrated in a strongly negative way by the extent to which parents in schools such as School H and School I actively withheld their children from school during the period of the dispute. The point has been made before that, looking at the educational process systematically, parents are effectively part of the wider school system.

d) Flexibility in Curriculum

One teacher commented that the dispute had at least taught him of the need to be flexible. The amount of flexibility in curriculum and teaching methods was a critical factor in enabling other changes in school operations to be effective. The "social system" of the school had changed in many instances, in terms of the greater isolation of students from one another and from teaching staff. Unless the "technical system" of the educational process could adjust to meet this situation, most students would not have the means to operate in a more self-reliant fashion.

e) School Temperature

The physical temperature of the school proved to be a factor which could still override all else. A cold school was an uncomfortable, unfriendly place. Most schools were able to maintain at least a semblance of warmth. The exception was School A. During much of the dispute, there were parts of the school that had virtually no heat. In retrospect, the school might have been much better to have operated only half of the building each day, with students attending on a schedule of alternate days. This plan which had been proposed by some of the teaching staff was rejected in the first days of the dispute. Its rejection was one of the sources of staff discontent which festered throughout the six-week period and on after.

f) The Inter-Dependance of Factors

Clearly, what appear to be key variables are factors that are very much inter-related. A way of interpreting this interdependence is to regard the school as a "socio-technical" system. Within its boundaries, the school can be thought of as a set of techniques and educational technology (which includes the physical plant of the school building, and the school buses, which are its main transportation facility). This "technical system" is combined with a set of people who are related

primarily through their participation in various roles, such as pupil, teacher, custodian, maintenance worker, bus driver, secretary, principal and as this study points out, parents.

The labour dispute in the West Kootenay schools meant the suspension of services by certain of the people within the system, i.e. those persons occupying roles of custodian, maintenance worker, and in some cases, bus driver and secretary. The loss of this personnel had consequences for both the technical and social systems of schools. The pressure placed on people in the school system led them to develop some new operating procedures and temporary adjustments in work roles. The innovations which appear to have been most effective were those procedures which jointly met the technical requirements of the education process as well as the school-related needs of people (i.e. pupils, teachers) in the system. These procedures and other approaches suggested by the outcomes of this dispute are the subject of the next chapter.

VI. MINIMIZING THE EFFECTS

Most of what is presented in this chapter should be regarded as guidelines for the consideration of any other school district(s) faced with a similar dispute in the future. The recommendations for school operations cover both the dispute and post-dispute periods, which are equally important phases of any effort to minimize the effects on school performance. Some general principles for management during the dispute are derived both from reports of initiatives taken specifically in the West Kootenay situation, as well as from general theory about management of stress and organizational change[5]. This chapter begins, however, with a very basic recommendation on how to assist any specific school district(s) in interpretating these general guidelines to meet a particular situation.

a) A Recommendation to the Ministry of Education for provision of an ad-hoc Support Team available to assist in the management of any future dispute situation.

Two of the school districts involved in the dispute examined in this study also experienced a dispute in the previous school year. By all reports from school personnel and students in those districts, the ability of schools to cope with this most recent dispute benefited from the previous year's experience. Apprehension amongst staff and students was lessened, and forewarning had been given of some critical points needing clarification in the management of schools during the dispute. Some of that forewarning can be offered to other school districts by this report. However, no study such as this can prescribe specific policies that have universal applicability. There is great variation amongst schools and school districts. To find the policy which fits a particular situation requires judgement and interpretation of some general guidelines.

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[5] Bryant, D. "The Psychology of Resistance to Change", Management Services, March 1979, pp. 10-16.

Bryant, D. & Painter, B. "An Action Research Approach to Organizational Change", in Manpower Planning and Organization Design, Plenum Press, 1978.

In order that other school districts can benefit most from the type of experience reported in this study, it is recommended that a support team of two or more school personnel who have experience in handling such a labour dispute in the school system be made available to other districts involved in any future dispute. The use of the support team would obviously have to be at the discretion of the school district(s), and even then, likely on a part-time basis only.

The precedent for this kind of inter-district cooperation is provided by such procedures as school evaluation teams. As for the availability of personnel to perform this support task, from the West Kootenay region alone, any one of the school personnel mentioned in the Acknowledgements section of this report would be eminently qualified.

b) General Principles for a School District in Managing the Dispute

1. Recognize that Schools are NOT in "Regular Operation"

A school system in the midst of a labour dispute is like an aircraft flying without one of its engines or a manufacturing plant with a breakdown of one of its key machines. It is performing in sub-optimal conditions. To continue operation requires change in the way of doing things. It implies either a reduction in speed or a shift in course and direction.

The ability to make the required adaption depends very much upon having a clear assessment of the reality of the situation. This understanding of what is occurring with the school system must be shared by school personnel, students and parents, if they are to cooperate in making the kinds of changes likely required. Communication becomes critical in such a situation of stress, and communication depends on a certain level of honesty and acknowledgement of reality.

In the West Kootenay situation, where there was an acknowledgement of the extra-ordinary nature of the circumstances, communication and morale seemed to be strengthened, particularly in the relationship between staff and students, and staff and parents.

This is not to underestimate, however, the considerable pressure placed on administrative and teaching staff to behave contrary to reality, i.e. as if schools were in "regular operation". The tendency in the West Kootenay situation was for both parties involved in the dispute, labour and management, to present to the public an impression that the school system was indeed operating quite normally. What was created was the expectation that operations should be normal, and if they were not, the implication was that school personnel were performing inadequately.

Therefore, in order for persons within the school system to recognize and truly accept the nature of the disruption, it is necessary for the parties to the dispute to make the same acknowledgement of reality.

2. The Need for Leadership

The notion that people rally around in times of adversity was not the predominant experience in the case of the West Kootenay dispute. Particularly as the dispute wore on, there was apprehension and the threat of conflict within the school system. There was a need for decisiveness, and for the decision-making process to have some visible focus. Invariably, this meant that the district superintendent played a key role, although the quality of leadership was not so much a phenomenon of individual initiative as it was a consequence of effective teamwork amongst the group of school principals led by the district superintendent.

Another aspect of leadership was the ability to present the situation as a challenge. This implied a positive response as compared with a defensive reaction to the circumstances. The significance of this attitude

was felt at both the school and district levels of organization. It is, in part, to develop the confidence of leadership, that it has been recommended that the ministry make available to a school district the experience of school personnel who have previously dealt with such a dispute in the school system.

3. Adaptive Planning: Consistency with Flexibility

A dispute of this kind has no predictable duration. The paradox is, however, that unless one estimates some length of time to the dispute, planning becomes impossible, and without planning, no significant innovation in methods can be developed. In the West Kootenay situation, the approach taken was to plan in stages. Policy on matters such as operating hours was reviewed periodically, usually every two weeks. For each brief period, however, there were seldom any changes in major operating policies. This form of adaptive planning provided a degree of consistency which allowed for the setting of some short-term objectives, while the approach also made it possible for schools to be flexible as circumstances changed in the life of the dispute.

Whatever plan is developed, at whatever level of school operations, it must remain flexible. The reason is that the critical factor which a school does not control is the turn of events emanating from the collective bargaining process itself. For instance, schools can suddenly be closed by picketing.

The flexibility must, however, take place within a framework of admin-trative consistency. Otherwise, confusion and greater uncertainty develop, particularly in the minds of the public. In the West Kootenay situation, there was a need for consistency in the operating hours of schools within a given district, even if those schools were equipped with different heating systems. Otherwise, the pressure placed on each individual school

to provide special treatment for its students would have put the less-equipped schools at a comparative disadvantage, thereby generating greater resentment, a feeling of injustice and of having been penalized -- all of which are the sorts of feelings that prevent a positive attitude towards coping with the disruption. Admittedly, there were well-heated schools which could have operated for longer hours than the district norm, and which therefore felt this general policy to be unreasonable and unjust from their perspective. The recommendation in dealing with this dilemma would be to establish across-district policies at the outset, and gradually introduce some variation to take into account special circumstances.

In all the uncertainty created by the disruption, there is a need to maintain a sense of order, (which is not necessarily a sense of nothing having changed). This was the value in the West Kootenay situation of maintaining the schools in operation for a minimal period of two hours at the outset of the dispute. However, during this initial period, more planning could usefully have taken place, (except in most cases at the senior level of school administration). What prevailed was a belief that the dispute would not last more than a few days. Even given that belief, it would have been useful to have developed instructional and administrative plans for the alternative, so that in the chance of a prolonged dispute, staff and students would be prepared as well as possible.

4. Involve Teaching Staff in the Management of the Dispute

In one school district (Z), a special committee of the Teacher's Association met with the School Board and C.U.P.E. representatives to keep lines of communication open with both bargaining parties during the life of the dispute. The purpose of this communication was to protect teachers' interests and to keep teachers aware of what was happening in the bargaining process. Early in the dispute, a general meeting of the Association was

held at which representatives from both parties explained their respective positions to approximately 230 teachers within the district. Generally, the process helped alleviate the feelings of powerlessness which affected many teachers, particularly in the other two districts.

As well as contributing to teaching staff morale, communication with teaching staff can provide the parties to the dispute with some important information about the effects of the dispute on school performance. Knowledge of impending or existing effects should improve rather than hinder the collective bargaining process.

5. Dialogue with Parents

At the district level, there was usually constant communication with the public through the various media, including a daily advertisement of school hours in the local newspaper. At the individual school level, most administrators were kept busy at the telephone answering parents' complaints and queries. However, understanding and cooperation from parents at large usually did not develop without the incident of some parents' protest which generated a public discussion with school officials. In the case of one secondary school (School E) the protest proved to be a turning point in the school's ability to handle the dispute. Out of the protest experience, every parent was contacted by telephone, informed of the school conditions and requested to cooperate in assuring the attendance of students. The rate of absence fell almost immediately to its normal rate. At the school level, this kind of direct approach to parents is well worth the effort.

Whatever fear and uncertainty parents feel during such a dispute will, in most cases, negatively affect students. It is important to counter this fear with some knowledge about what is actually occurring within the schools. To the extent that parents wish to assume a more active

role in support of the school, this should be thoughtfully organized. The apparent reluctance which some school boards had in making a car allowance available to parents for the transport of students during the dispute is an example of how not to develop cooperation and understanding from parents. Indeed, the possibility of providing some liability protection should be examined for parents who voluntee to transport children from other families as well as their own.

It is generally recommended that school districts encourage an active rather than a reactive role for parents. The significance which parents have in the overall educational process is never more apparent than it is during such a disruption in normal operations.

c) Specific Recommendations for School Operations

Most of the recommendations which follow are strategies for coping in the period of the dispute itself. A small number of comments concern the recovery phase of the post-dispute period. The two phases are equally critical and inter-dependent. Although there is inevitably some reduction in overall learning during the dispute, the severity of this loss depends mainly upon what ability there is to recover. In turn, the ability to recover is very much a function of the level of motivation that has either been developed, damaged or sustained during the period of the dispute.

1. Do NOT Operate Facilities that are Uncomfortably Cold

Classrooms and other facilities in which persons remain uncomfortably cold despite heavier clothing such as sweaters or light jackets are likely to be unproductive instructional settings. Rather than expand great effort to maintain questionable use of these facilities, it would be wiser to maximize use of more reliable facilities. This may require some adjustment within a school or between schools. It may also mean that some facilities are operated for much longer hours than others.

2. Activities and Behaviour can be Altered to Reduce Litter and Waste

This is a matter which must be handled with extreme sensitivity. Don't encourage students or staff to do clean-up work not normally done by them or at least expected of them under normal circumstances. What is possible, given sensitive leadership and a supportive climate within the school, is that activities and behaviour may be altered so as to generate less litter or waste. For example, at the secondary level, students in at least one of the schools in the West Kootenay region (School H) assumed responsibility for taking home their own lunch wrappers, etc. In another school (School E), the litter problem was beaten after students were reminded of their normal responsibilities. One of the behavioural outcomes of this initiative was a significant reduction in internal vandalism within the school for the remainder of the school year.

3. Use of Self-Contained Curriculum Units

At least one physics teacher in the West Kootenay region gathered together from the year's curriculum a number of units which could be taught virtually in isolation from one another. The advantage gained by this method was that teaching was less disrupted by sporadic student attendance since the units did not rely on a progression.

Seldom are such units readily available, which is one major reason for special planning to cope with such a dispute. One principal who anticipated the onset of a dispute prepared for his mathematics classes a book of 200 problems, any 150 of which a student was expected to answer during a 5-6 week period.

Both of these cases are examples of restructuring in the curriculum which provided students with meaningful achievement objectives despite all the uncertainty of the dispute. The self-contained units also facilitated students' performing work on their own, and gave student and teacher an opportunity to evaluate how well a student was coping in this situation.

4. Devote Time to Review and Discussion

Home assignments without review and discussion in class are of questionable value. It is better to sacrifice some of the quantity of material in order to improve student understanding. The feedback which a student receives in such a review is an important feature of motivation. Moreover, the self-discipline implied by home assignments is a behavioral pattern which will require some development and nurturing with many students. This development of self-discipline, and with it self-reliance, will depend upon personal attention from a teacher, which is not possible if instruction is given exclusively in a lecture style.

5. Flexibility in Length of Classroom Period

Most schools shortened all classes to a standard period of one hour or less. For the majority of subjects, this seems to have been very appropriate. In at least two cases, the 50 minute period is either too short or too long. For activity classes, the period needs to be longer. For foreign language instruction, the periods need to be as frequent as possible, and therefore, they could be as short as 20-30 minutes if that would permit almost daily practice.

6. Wherever possible, Daily Classes

Students and staff are almost unanimous in their preference for daily, as opposed to periodic classes. Alternate school days may be necessary but it is an unfortunate break in the basic routine of school attendance. Also, as noted above, some subjects require an almost daily practice.

It is true, nonetheless, that teachers in some elementary schools which were forced to operate on alternate days benefited from some extra preparation time. While this factor is extremely important, it can be accomplished just as effectively through a different deployment of staff during daily operations.

7. Deployment of Staff During the Dispute

A very basic recommendation is that teachers should continue working with the same students whom they were in the process of teaching prior to the dispute. One secondary school shifted teachers to different classes as a result of other changes in school operations, and found it to be disconcerting as well as inconvenient to students and staff.

An innovation which was tried with more success in another school was a form of team teaching. Staff in one department, mathematics, collaborated in the preparation of course notes and the marking of assignments. Without an increase in the absolute amount of time available for preparation, it was nevertheless felt that the quality of instruction improved, and certainly, the stress felt by teaching personnel was reduced.

Most school personnel believe that they did not make good use of teaching assistants and counselling staff during the dispute. For instance, there may have been a tendancy to regard counselling classes as a frill during a period of retrenchment to a core curriculum. To the contrary, however, the use of counselling services would never be more important than during a stressful period such as the dispute. All efforts should be made to support students and develop their ability to be increasingly self-reliant. As one means of maintaining student morale, the counselling and teaching assistant services deserve disproportionate emphasis in a situation such as the dispute.

8. Supplementary Teaching After the Dispute

There were several forms of "catch-up" programs that districts in the West Kootenays employed in the post-dispute period. There was tutoring over the Christmas holdiays, which senior students had to provide because teaching staff declined to participate. In another school district, a special learning assistance program was offered by the school

board and the teachers in the final term of the school year. Student participation was of course on a voluntary basis.

The most recommendable form of assistance was, however, a procedure which occurred spontaneously in only a few classes in two or three school once the dispute had ended. The assistance came in the form of a supplementary teacher who enabled the regular class teacher to provide considerably more individualized instruction to students who needed the attention in the period immediately after the dispute. The employment of supplementary staff during regular hours would seem to be a very effective and economic method of assisting the recovery of students in the post-dispute period.

9. Grouping of Students

A fundamental problem in the post-dispute period is that there is likely to be even wider than normal differences in the amount of learning accomplished by students within the same class. These differences could be for a variety of reasons -- attendance, motivation, ability -- but, in any case, it creates a difficult teaching situation. An approach used in several elementary schools and in a few secondary schools was the grouping of students according to their stage in learning the subject material. The groupings were usually a temporary and a self-adjusting mechanism to allow teachers to focus on the students' level of understanding and to encourage students to interact and assist one another in catching-up.

10. Tutoring by Telephone and Other Means

While quite a number of individual teachers reponded informally to requests for help from neighbours' children, a few schools organized an effective telephone tutoring system that served primarily those students who were unable to obtain transportation to school. Another way in which the school system was extended during the dispute was a form of courier service which students from outlying areas provided one another: one

student could transport assignments back and forth from the teacher to a group of three or four students. Informally, it happened that some more proficient students provided tutorial help to their school friends who were having difficulty with home assignments. These and many other examples of ingenuity during the dispute are proof of the old adage that "where there is a will, there is a way".

11. Monitoring the Effects on Student Performance

The ability to adapt depends upon an accurate assessment of conditions prevailing in the school. Effects on academic achievement are difficult to isolate over a short period of time. However, teachers do employ various forms of skill testing, particularly at the beginning of semesters in order to determine the level of preparation of their classes. A similar kind of testing could be done over the period of a dispute, primarily for diagnostic purposes to inform teachers of how effective have been their methods.

The most meaningful data that could likely be collected during a dispute would relate to student attitudes and work habits. The sorts of data which could give an indication of attitudes is suggested in an earlier section of this report (Chapter IV (c) Other Indiciations of Possible Effects on Student Attitudes). However, the most effective method of determining student sentiments, while also developing a positive student attitude, would be through some form of student involvement in the process of managing the effects of the dispute within each individual school. This relates most directly to the following recommendation on the role of students' councils.

12. Keep Student Councils Functioning

Most student councils did not remain active during the period of the dispute. However, in one secondary school (School H), regular consultation was maintained with the students' council, concerning some key aspects

of school administration. School H was the one secondary school in the region which arranged to have a lunch period for its students. This was decided after an understanding had been reached with the student body regarding its role in maintaining the cleanliness of the school. Agreement was also reached to hold at least one school dance after students' council assumed responsibility for organizing the clean-up. In the midst of the dispute, with all existing transportation difficulties, a trip to a local ski hill was arranged by staff and students jointly.

When done with care and skillful leadership, the delegation and sharing of responsibility can evoke a responsible attitude in return. The positive morale and good spirit that was sustained in School H, for example, was a key factor in the school's ability to recover from the dispute. It is another indication that controlling the human and social factors is as important as dealing with the technical problems, if the effects on school life are to be minimized.

13. Do NOT Suspend Extra-Curricular Activities

One of the strongest factors affecting student attitudes, particularly in the latter half of the dispute, was the tedium of school life. Admittedly, the limited hours of school operation left little time for extra-curricular activity, and there was always the concern about clean-up problems after the event. However, the frequent mistake was to assume that there was no time available for such activities.

One elementary school demonstrated what is possible: several weeks through the dispute, when it was apparent that students were getting bored with the routine, instruction was suspended for most of one day which was set aside for exercise, games, art and music activities. Extra-curricular activities are possible during limited school operations if they are, in

fact, made part of the school timetable, perhaps on a periodic basis. It is the consistent irony of the dispute situation that many activities which might normally be regarded as "extra" become integral to the maintenance of the quality of school life during such extra-ordinary, circumstances as a dispute.

14. After it's all over, Its NEVER Back to Normal

For many students and teachers, the effects of the disruption were only really felt in the final weeks of the school year, when suddenly a panic was on to complete the prescribed curriculum. Schools operating on a semester system were made aware sooner of the need for adjustment once schools returned to regular hours of operation: generally, semestered schools lengthened the first semester by 2-3 weeks. Schools operated on a 10-month or full-year basis would likely have been advised to have dropped one of their 4 regular examination periods during the school year. In whatever situation, the principle is that adaptation and innovation is a continued necessity in the recovery phase of the post-dispute period.

VII. A POSTSCRIPT

The Importance of Human Factors in School Performance

The experience of the West Kootenay labour dispute demonstrated how critical are social factors such as parental support and teachers' attitudes to the performance of the educational system. Indeed, education has been described as a "socio-technical" process. For example, during the dispute, given the nature of the community, or given the attitude of the teaching staff, certain technical/pedagogical innovations were either possible or extremely difficult to achieve. On the other hand, the nature of the physical plant determined to a considerable extent the amount and the quality of interaction between teachers and students. Within a given school district, there was often great variation amongst schools in these social and technical factors. Coordination of these factors was therefore most critical at the level of the individual school. In other words, the dispute revealed that the basic unit of operations within the educational system is the individual school.

Nevertheless, the traditional management structure is not built along school lines, but rather through the parallel hierarchies of the pedagogical and technical/maintenance functions. These two functions are managed at the district level under the respective authorities of the District School Superintendent and the Secretary-Treasurer of the School Board. The structure is designed as if education were essentially a "technical" process, in terms of either pedogogy or physical maintenance. It does not formally recognize the importance of the interaction between the people who carry out these different functions.

The inconsistency between the traditional management structure and the real nature of school operations suggests a high probability that problems at the lower levels of the school system are often not resolved.

These problems in the day-to-day work experience of teaching and non-teaching employees may then be stored up as grievances which eventually get passed on to a collective bargaining process that can become overloaded with conflict.

The longer-term recommendation of this study is, therefore, that School Boards and the Ministry of Education determine to what extent their employees experience work-related problems that are not resolved by the present system. This inquiry would best be conducted at the local district level, with the collaboration of the local representation of the employee group, i.e. CUPE or the local Teachers' Federation[6]. If the hypothesis stated above is found to be true, remedial action is likely to improve both the quality of worklife and performance in the public school system, not only during a dispute but all throughout the school year.

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[6]Painter, B. "Experience of Employee Participation in Decision-Making", Quality of Working Life: the Canadian Scene: Labour Canada, pp. 5-10, 13-19, Autumn 1978.

VIII. STATISTICAL APPENDIX

a) During the Dispute

(The following information is drawn from individual school responses to a questionnaire administered to principals in Part I of this study. Attendance is expressed as a percentage of enrolment).

	Attendance in the 2-week Period Prior to the Dispute	Average Attendance in the 6-week Period During the Dispute	Attendance Loss During the Dispute (expressed as a comparison with Attendance Prior to the Dispute
Secondary Schools:			
School A	93%	77%	-16%
School B	95%	88%	- 7%
School C	92%	83%	- 9%
School D	95%	87%	- 8%
School E	93%	90%	- 3%
School F	92%	88%	- 4%
School G	93%	91%	- 2%
School H	94%	57%	-37%
Elementary Schools:			
School I	95%	53%	-42%
School J	95%	93%	- 2%
School K	97%	97%	Nil
School L	95%	95%	Nil
School M	95%	90%	- 5%
School N	97%	95%	- 2%
School O	96%	91%	- 5%
Grand Forks School District			
Secondary School:			
School P	93%	89%	- 4%
Elementary Schools:			
School Q	95%	94%	- 1%
School R	95%	95%	Nil

b) Absence Rate in the Post-Dispute Period

	Absence Rate for Total School Year 1978-79	Attendance Loss during the Dispute (as a Percentage of Total Possible Attendance in the School Year	Absence Rate For Total School Year 1978-79, (Adjusted for Attendance Loss Attributable to Dispute)	Average Absence Rate For School Years 1976-77 and 1977-78	Comparison of Absence Rate in 1978-79 with Average Absence Rate in 1976-77, 1977-78	Absence Rate in Post-Dispute Period
Secondary Schools:						
School A	19.4%	-2.4%	17.0%	9.2%	+7.8%	Large Increase
School B	9.7%	-1.0%	8.7%	6.3%	+2.4%	Slight Increase
School C	7.3%	-1.4%	5.9%	8.7%	-2.8%	Slight Decrease
School D	5.4%	-1.2%	4.2%	4.9%	- .7%	Normal
School E	9.1%	- .5%	8.6%	7.0%	+1.6%	Slight Increase
School F	10.4%	- .6%	9.8%	10.0%	+ .8%	Normal
School G	7.6%	- .3%	7.3%	6.5%	+ .8%	Normal
School H	14.1%	-5.7%	8.4%	8.1%	+ .3%	Normal
Elementary Schools:						
School I	14.4%	-6.4%	8.0%	8.2%	- .2%	Normal
School J	7.0%	- .3%	6.7%	5.4%	-1.3%	Slight Decrease
School K	5.4%	Nil	5.4%	4.8%	+ .6%	Normal
School L	5.5%	Nil	5.5%	4.8%	+ .7%	Normal
School M	6.7%	- .8%	5.9%	5.5%	+ .4%	Normal
School N	4.8%	- .3%	4.5%	3.5%	+1.0%	Slight Increase
School O	4.1%	- .8%	3.3%	4.5%	- .8%	Normal
Grand Forks School District:						
Secondary School:						
School P	9.8%	- .6%	9.2%	9.4%	- .2%	Normal
Elementary Schools:						
School Q	7.0%	- .1%	6.9%	7.8%	- .9%	Normal
School R	5.9%	Nil	5.9%	5.0%	+ .9%	Normal

c) Comparison of Student Drop-Out Rates for the years: 1976-77, 1977-78, 1978-79.

(Drop-Out Rates are expressed as a percentage of Net Enrolment which takes into account transfers to and from the school).

	1976-77	1977-78	1978-79	Average Drop-Out Rate in 2-year Period, 1976-78	Comparison of Drop-Out Rate for Year 1978-79 with Average Rate of Years 1976-78
Secondary Schools:					
School A	7.0%	5.4%	7.8%	6.2%	+1.6%
School B	1.2%	0.0%	1.7%	0.6%	+1.1%
School C	8.0%	7.5%	7.3%	7.0%	-0.5%
School D	6.8%	6.6%	8.4%	6.7%	+1.7%
School E	2.3%	2.4%	0.6%	2.4%	-1.8%
School F	17.2%	17.1%	14.0%	17.2%	-3.2%
School G	2.7%	1.5%	4.4%	2.1%	+2.3%
School H	5.6%	4.5%	8.4%	5.1%	+3.3%
Elementary Schools:					
School I	0.0%	0.0%	0.0%	0.0%	Same
School J	0.5%	0.0%	0.0%	0.3%	-0.2%
School K	0.0%	0.0%	0.0%	0.0%	Same
School L	0.0%	0.3%	0.0%	0.2%	-0.2%
School M	0.2%	0.0%	0.2%	0.1%	+0.1%
School N	0.0%	0.0%	0.0%	0.0%	Same
School O	0.0%	0.2%	0.0%	0.1%	-0.1%
Grand Forks School District:					
Secondary School:					
School P	8.2%	5.3%	5.6%	6.8%	-1.2%
Elementary Schools:					
School Q	3.2%	0.0%	1.1%	1.6%	+0.5%
School R	0.7%	0.0%	0.4%	0.4%	Same

d) Comparison of Absence Rates prior to and during the Dispute for Students in Academic and Vocational Programs in School C.

(Based upon a random sample of 20 students from each of the Academic and Vocational programs in each of Grade 10 and 11).

	Average Absence Rate Prior to Dispute		Average Absence Rate During Dispute		Increase in Absence Rate During Dispute	
	Academic	Vocational	Academic	Vocational	Academic	Vocational
Grade 10	2%	5%	5%	14%	3%	9%
Grade 11	3%	8%	5%	19%	2%	11%

e) Pattern of Student Absences in School H, Oct. 26 - Dec. 5, 1978
(Total days = 29)

	Grade:	7	8	9	10	11	12		Total
DAYS ABSENT									
	29	1	1					2	
90-100%	28	111	1	1	1	111	1	10	16 (6.5%)
	27	1	1	1	1			4	
	26		11	1	1			4	
80-90%	25			1				1	12 (5%)
	24			111	1	1	11	7	
	23	11	11	1		11		7	
70-80%	22		1	1		11	1	5	17 (7%)
	21	1	1			11	1	5	
	20		11	1		111		6	
60-70%	19		1		1	111		5	14 (6%)
	18		1			1	1	3	
	17		11111	1	1	1	11111	14	
50-60%	16	1	1		1111		1	7	21 (9%)
	15	11	1	111	1	11		9	
40-50%	14		1	111	11		1	7	26 (10.8%)
	13		1	1	1	1111	111	10	
	12		11		111	11	1111	11	
30%-40%	11		11	1	1	11	11	8	28 (11.7%)
	10	1	1	11	11	1	11	9	
	9	1		1111	1	1111	11	12	
20-30%	8	11	111	11	1111	1	11	14	34 (14%)
	7	1	11	11	1		11	8	
	6	111	11		1111	1	1	12	
10-20%	5	11	11111		11111	1		15	42 (18%)
	4	11?	1111	1	1111	11	1	15	
	3	1	111	11	1		1	8	
0-10%	2	1111	11	1111	11			13	29 (12%)
	1	11			1	11	1	6	
	0	1	1					2	
								239	

Average daily attendance 57%

34% Absent 50% +
45% Absent 40% +
57% Absent 30% +
71% Absent 20% +
88% Absent 10% +

f) Number of Student Drop-Outs from Grade 12 in three years, 1976-79

	1976-77	1977-78	1978-79
School A	19	14	26*
School C	26	17	28*
School D	10	9	9
School F	54	37	27
School H	4	2	7*

* Denotes a Grade 12 drop-out rate higher than the average Grade 12 drop-out rate of the previous two years, even for School C which recorded normal overall drop-out rate (all grades) for 1978-79.

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